

[illegible]

IN RE PATENT APPLICATION OF)
)
Sweezer, et al.)
)
Serial No. 08/566,405)
)
Filing Date: 12/01/95)
)
Title: CATHETER SYSTEM AND)
METHOD FOR VENTING THE)
LEFT VENTRICLE)
_____)

Group Art Unit: Unknown

Direct all telephone calls to Frederick Gotha, (818) 796-1849.

Figure 1 consists of seven histograms, labeled (a) through (g), showing the distribution of the number of non-zero elements in the vector x for different values of n . The x-axis for all histograms is 'Number of non-zero elements' ranging from 0 to 100. The y-axis is 'Frequency' ranging from 0 to 10. The distributions are centered around 50 for $n=10$ and shift towards higher values as n increases, with the peak frequency increasing as n increases.

Label	n	Approximate Peak Frequency
(a)	10	5
(b)	20	10
(c)	30	15
(d)	40	20
(e)	50	25
(f)	60	30
(g)	70	35

ASSIGNEE: ENDOSURGICAL DEVELOPMENT CORPORATION

Date: 06/10/86

CERTIFICATE OF MAILING PURSUANT TO 37 CFR 1.8
I hereby certify that this paper is being deposited in the
United States mail as first class mail with postage prepaid,
and is addressed to: The Commissioner of Patents and Trademarks
Washington, DC 20231. Such service was made on

DATE: 9/24/96

By: Doni H.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent Application to

SWEEZER, *et al.*

Application No.: 08/566,405

Filed: December 1, 1995

For: CATHETER SYSTEM AND
METHOD FOR VENTING
THE LEFT VENTRICLE

Examiner: Not Yet Assigned

Art Unit: Not Yet Assigned

POWER OF ATTORNEY BY ASSIGNEE (REVOCATION OF PRIOR POWERS)

Assistant Commissioner of Patents
Washington, D.C. 20231

Sir:

As assignee of record of the entire interest of the above-identified patent,

REVOCATION OF PRIOR POWERS OF ATTORNEY

all powers of attorney previously given are hereby revoked and

NEW POWER OF ATTORNEY

the following attorneys and/or agents are hereby appointed to prosecute and transact all business in the Patent and Trademark Office connected therewith.

SEND CORRESPONDENCE TO:	DIRECT TELEPHONE CALLS TO:
Jens E. Hoekendijk HEARTPORT, INC. 200 Chesapeake Drive Redwood City, California 94063 (415) 306-7900	JENS E. HOEKENDIJK (415) 306-7900 X215

ASSIGNEE CERTIFICATION

Attached to this power is a "CERTIFICATE UNDER 37 CFR 3.73(b)."

19 Sept. '96
Date

Dick Brewer
Executive Vice President, Operations

Applicant: **SWEEZER, et al.**

Application No. 08/566,405

Filed: December 1, 1995

For: **CATHETER SYSTEM AND METHOD FOR VENTING THE LEFT VENTRICLE**

Heartport, Inc., a Delaware Corporation, certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of a chain of title from the inventors of the patent application identified above, to the current assignee as shown below:

1) From: William P. Sweezer, Ronald L. Coleman and Walter W. Larkins, III
To: Endosurgical Development Corp.

A copy of the Assignment and Recordation Form Cover Sheet are attached.

3) From: Endosurgical Development Corp.
To: Heartport, Inc.

A copy of the Assignment is attached.


The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to act on behalf of the Assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 19 Sept. '86

Signature:



Dick Brewer
Executive Vice President, Operations

ENT

5-66-2/ Heartport No. 073-CP

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

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ASSIGNMENT OF PATENT APPLICATION

WHEREAS, **Endosurgical Development Corp.**, a California corporation, having its principal place of business at 526A Irene Avenue, Redondo Beach, CA 90277, hereinafter referred to as "Assignor," is the owner of the invention described and set forth in the below-identified United States patent application:

Title of the Invention: **CATHETER SYSTEM AND METHOD FOR VENTING THE LEFT VENTRICLE**

Application No.: **08/566,405**

Inventor: **Sweezer, et al.**

Filing Date: **December 1, 1995**

WHEREAS, **HEARTPORT, INC.**, a Delaware corporation, located at 200 Chesapeake Drive, Redwood City, California 94063, hereinafter referred to as "Assignee," is desirous of acquiring an interest in the invention and patent application:

For good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has assigned, and by these presents does assign to Assignee all right, title and interest in and to the invention and patent application and to all foreign counterparts (including patent, utility model and industrial designs), and all future improvements thereon, and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world. The right, title and interests to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignor had this assignment not been made, for the full term of any Letters Patent issuing on the patent application or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees that it will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has signed its name on the date indicated.

Endosurgical Development Corp.

by:

Signature

Jeff Kadan

Name (type or print)

President and CEO

Title

Signature

Frederick Gotha

Name (type or print)

Secretary

Title

Date

Date

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

WILLIAM R. SWEETZER, JR.
RONALD COLEMAN
WALTER W. LARKINS, III

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other _____

Execution Date: 06/07/96

2. Name and address of receiving party(ies):

Name: ENDOSURGICAL DEVELOPMENT CORPORATION

Internal Address: _____

Street Address: 526 A IRENA AVE.City: REDWOOD BEACH State: CA ZIP: 90277Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s)

- (1) 08/566,405 FILED 12/01/95
(2) 08/566,298 FILED 12/01/95

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: FREDERICK GOTH A, ESQ.

Internal Address: _____

Street Address: 80 S. LAKE AVE. SUITE 823City: PASADENA State: CA ZIP: 911016. Total number of applications and patents involved: 27. Total fee (37 CFR 3.41):..... \$ 80.00☒ Enclosed☐ Authorized to be charged to deposit account

8. Deposit account number: _____

(Attach duplicate copy of this page if paying by deposit account)

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

FREDERICK GOTH A

Name of Person Signing



Signature

06/10/96

Date

Total number of pages comprising cover sheet:

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09092374 060590

JOINT TO CORPORATE ASSIGNMENT

WHEREAS, the undersigned,

(1) William P. Sweezer, Jr.

(2) Ronald Coleman

(3) Walter W. Larkins, III

(hereinafter termed "Inventors"), residents of

(1) 3443 Stage Coach Drive

(2) 831 61st Avenue

(3) 1988 Rolling Vista Drive, #20

respectively, Cities of

(1) Lafayette

(2) Oakland

(3) Lomita

respectively, States of

(1) California

(2) California

(3) California

respectively, have invented certain new and useful improvements in:

CATHETER SYSTEM AND METHOD FOR VENTING THE LEFT VENTRICLE

and have executed a declaration or oath for an application for a United States patent disclosing and identifying the invention:

On the

(1) ____ day of ____, 1995;

(2) ____ day of ____, 1995;

respectively;

Or

X Said application having SC/Serial Number 08/566,405 and filed on 12/01/95

WHEREAS Endosurgical Development Corporation (hereinafter termed "Assignee"), a corporation of California, having a place of business at 526A Irena Avenue, Redondo Beach, California 90277, wishes to acquire the entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered jointly or severally by said inventors (all collectively hereinafter termed "said inventors"), and in and to any and all patents, certificates of invention and other forms of protection thereon (hereinafter termed "patents") applied for or granted in the United States and/or other countries.

NOW THEREFORE, for good and valuable consideration acknowledged by each of said Inventors to have been received in full from said Assignee:

1. Said Inventors do hereby sell, assign, transfer and convey to said Assignee, the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply in any or all countries of the world for patents, certificates of inventions or other governmental grants on said invention, including the right to apply for patents pursuant to the International Convention for the Protection of Industrial Property or pursuant to any other convention, treaty, agreement or understanding; (c) in and to any and all applications filed and any and all patents, certificates of inventions or other governmental grants granted on said invention in the United States or any other country, including each and every application filed and each and every patent granted on any

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"Ex parte" serial number GB3889872.2
Date of filing June 11, 1986
I, the undersigned, do hereby certify that the foregoing is a true and correct copy of the original as filed with the Commissioner of Patents and Trademarks, Washington, D.C.
Frederick Gotha

Frederick Gotha

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application which is a division, substitution, or continuation of any of said applications; (d) in and to each and every reissue or extension of any of said patents; and (e) in and to each and every patent claim resulting from a reexamination certificate for any and all of said patents.

2. Said Inventors hereby jointly and severally covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and other countries. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, executing of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for complying with any duty of disclosure; (c) for prosecuting any of said applications; (d) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (e) for filing and prosecuting applications for reissue of any of said patents; (f) for interference or other priority proceedings involving said invention; and (g) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, reexamination proceedings, compulsory licensing proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventors in providing such cooperation shall be paid for by said Assignee.

3. The terms and covenants of this Assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventors, their respective heirs, legal representatives and assigns.

4. Said Inventors hereby jointly and severally warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Inventors have executed and delivered this instrument to said Assignee on the date of acknowledgment before the Notary Public as given below.

(1)

William P. Sweezer, Jr.
William P. Sweezer, Jr.

(1)

State of California

County of Contra Costa

On 6/7/96 before me, Joel Resnikoff, Notary Public, personally appeared William P. Sweezer, Jr., personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Joel Resnikoff
Signature



(2) Ronald Coleman
Ronald Coleman 6/7/96

(2) State of _____)
County of _____)

On _____ before me, _____, personally
appeared _____, personally known to me (or proved to me on the basis of satisfactory
evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that
he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the
instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal. _____
Signature

(3) Walter W. Larkins, III
Walter W. Larkins, III 6/7/96

(3) State of _____)
County of _____)

On _____ before me, _____, personally
appeared _____, personally known to me (or proved to me on the basis of satisfactory
evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that
he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the
instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal. _____
Signature